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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/775,745

02/02/2001

Christopher S. Moore

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9392

67813

7590

01/28/2008

BRINKS HOFER GILSON & LIONE/SanDisk

P.O. BOX 10395

CHICAGO, IL 60610

EXAMINER

HENEGHAN, MATTHEW E

ART UNIT

PAPER NUMBER

2134

MAIL DATE

DELIVERY MODE

01/28/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/775,745

Applicant(s)

MOORE ET AL.

Examiner

Matthew Heneghan

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3,7,15,16,21,24,28,29,33,37-51 and 88-91 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3,7,15,16,21,24,28,29,33,37-51 and 88-91 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 31 October 2007 has been entered.

2. Claims 3, 7, 15, 16, 21, 24, 28, 29, 33, 37-51, and 88-91 have been examined.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 3, 7, 15, 37-45, and 88 are rejected under 35 U.S.C. 102(b) as being anticipated by WIPO Patent Publication No. 98/11723A1 to Inoue et al.

NOTE: All citations herein are made with respect to U.S. Patent No. 6,157,948, which is an English-language translation of this publication.

As per claims 3, 7, 37, 39, and 45, Inoue discloses an audio-video player (see column 18, lines 64-67) having a solid-state memory device, such as an IC card and/or ROM (which comprise semiconductors) in a common hardware construction (i.e. combinations thereof) (a write-once memory device) (see column 37, lines 17-21), as a storage unit, wherein program code from the device is used to fetch additional program segments (in different segments, see column 20, lines 15-27) from it (see column 22, line 56 to column 23, line 12) to the host device. Code may also be written to the storage unit from the host device using the program (see column 30, line 66 to column 31, line 8).

As per claims 15 and 88, the program code from the storage unit is not operative to enable I/O to other storage units.

As per claim 38, the providing of code is automatic, as it is based upon program flow.

As per claim 40, the amount of data that may be stored in a memory device is inherently limited to the capacity of the device.

As per claim 41, the source program may be written in a high-level (i.e. machine independent) language (see column 26, lines 60-64).

As per claim 42, the code may be intermediate code (see column 20, lines 10-13) that is inherently transformed into machine code at runtime, as this is necessary for operation of the CPU. This constitutes a theoretical machine.

Regarding claim 43, the program code and data loaded or stored by that program are stored in separate segments (i.e. regions).

Regarding claim 44, the program sizes may be fixed to the size of one transport packet (see column 35, lines 5-18).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 16, 21, 24, 28, 29, 33, 48, and 89-91 are rejected under 35 U.S.C. 103(a) as being unpatentable over WIPO Patent Publication No. 98/11723A1 to Inoue et al. as applied to claim 3 et al. above, and further in view of U.S. Patent No. 6,141,756 to Bright et al. further in view of U.S. Patent No. 6,308,317 to Wilkinson et al.

Regarding claims 16, 21, 24, 28, 29, 33, 48, and 89-91, Inoue does not discuss security considerations in program storage and loading.

Bright discloses the downloading to the system applications that are stored in encrypted form, and then decrypted by the system before execution during a bootstrap, which is an automatic loading of the drivers (see column 3, lines 11-15 and column 4,

lines 14-19). Bright further suggests that this prevents tampering of the information (see column 1, lines 27-45).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Inoue by storing applications, such as the I/O programs, in an encrypted form and then decrypting them in the system, as disclosed by Bright, in order to prevent the tampering of information.

Bright discloses an open-ended list of possible keys that may be used in the encryption/decryption (see column 3, lines 43-46), but does not specifically cite the usage of a card-specific key.

Wilkinson discloses the use of card-specific identifiers in the encryption process in order to establish a set of privileges for the card's applications (see column 16, lines 51-58).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the invention of Inoue and Bright by using the card identity in cryptography, as disclosed by Wilkinson, in order to establish a set of privileges for the card's applications.

5. Claims 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over WIPO Patent Publication No. 98/11723A1 to Inoue et al. as applied to claims 37 and 39 above, and further in view of U.S. Patent No. 5,956,505 to Manduley.

Inoue does not disclose the use of the invention on only a limited basis.

Manduley discloses the enabling of optional features in a system that may be used for a set number of times or for a certain duration, and suggests that such a temporary activation allows a user to have use of a feature on a rental basis (see column 7, lines 5-13).

Therefore it would have been obvious to one of ordinary skill in the art to further modify the invention of Inoue by allowing for the programs on Inoue's card to be used for a set number of times or for a certain duration, as disclosed by Manduley, to allow a user to have use of a feature on a rental basis.

6. Claims 49-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over WIPO Patent Publication No. 98/11723A1 to Inoue et al. as applied to claims 37, 39, and 40 above, and further in view of U.S. Patent No. 6,034,882 to Johnson et al.

Though the use of ROMs, which comprise semiconductor material, for program storage is discussed above with respect to Inoue (see the rejection of claim 40), the physical structure of the ROMs has not heretofore been addressed.

Johnson discloses the use of three-dimensional memory arrays, as described above, and states that higher memory densities, such as those offered by three-dimensional arrays, are required to meet the ever-increasing demands for denser semiconductors of the marketplace (see column 1, lines 14-19).

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to implement the invention of Inoue using the three-dimensional arrays disclosed by Johnson, to meet the demands for denser semiconductors.

Response to Arguments

7. Applicant's arguments filed 31 October 2007 have been fully considered but they are not persuasive.

In response to applicant's argument that Inoue does not require the program to read the program segments, a recitation of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Since Inoue's invention may be configured such that the invention cannot work without the program reading the program segments, it anticipates the claims.

Regarding Applicant's argument that one would not have been motivated to combine Bright with Wilkinson, Bright's disclosure does not preclude additional authentication (see column 3, lines 22-27); the use of card specific identifiers as per Wilkinson further enhances the security of the authentication process.

Conclusion

8. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew E. Heneghan, whose telephone number is (571) 272-3834. The examiner can normally be reached on Monday-Friday from 8:30 AM - 4:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand, can be reached at (571) 272-3811.

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Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
P.O. Box 1450
Alexandria, VA 22313-1450

Or faxed to:

(571) 273-3800

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Matthew Heneghan/

Primary Patent Examiner, USPTO AU 2134

January 23, 2008